Table 1 – Quality Criteria for Resource Sustainability
Soil Erosion

RESOURCE PROBLEM DEFINITIONS	QUALITY CRITERIA	ASSESSMENT TOOL	LAWS & REGULATIONS	EFFECTIVE PRACTICES
Sheet and rill erosion. Soil erosion caused by rainfall and/or irrigation that exceeds the soil loss tolerance level.	Soil loss amounts are at or below tolerance (T) levels according to the current sheet and rill erosion assessment tool found in FOTG section I	RUSLE	NREPA, Part 91 Food Security Act, as amended	Alley Cropping (311) Conservation Cover (327) Conservation Crop Rotation (328) Contour Buffer Strips (332) Contour Farming (330) Contour Orchard and Other Fruit (331) Cover Crop (340) Critical Area Planting (342) Forest Harvest Trails & Landings (655) Heavy Use Area Protection (561) Irrigation Water Management (449) Mulching (484) Pasture and Hayland Planting (512) Prescribed Grazing (528A) Recreation Area Improvement (562) Residue Management, Mulch Till (329B) Residue Management, No-till and Strip Till (329A) Residue Management, Ridge Till (329C) Residue Management, Seasonal (344) Contour Stripcropping (585) Stripcropping, Field (586) Terrace (600)
Wind erosion. The movement of soil, by wind forces, that exceeds the soil loss tolerance level.	Soil loss amounts are at or below tolerance (T) levels according to the current wind erosion assessment tool found in FOTG section I	Wind Erosion Equation	NREPA, Part 91 Clean Air Act	Alley Cropping (311) Conservation Cover (327) Conservation Crop Rotation (328) Cover Crop (340) Critical Area Planting (342) Cross Wind Stripcropping (589B) Cross Wind Trap Strip – Field (589C) Drainage Water Management (554)

				Herbaceous Wind Barrier (422A) Pasture and Hayland Planting (512) Prescribed Grazing (528A) Recreation Area Improvement (562) Residue Management, Mulch Till (329B) Residue Management, No-till and Strip Till (329A) Residue Management, Ridge Till (329C) Residue Management, Seasonal (329C) Windbreak/Shelterbelt Establishment (380)
Ephemeral gully/concentrated flow. Concentrated flow channels that begin where overland flow, including rills, converge. Usually obscured by tillage operations.	Channels are stabilized	Visual observation Gully Erosion Equation	NREPA, Part 91	Critical Area Planting (342) Diversion (362) Field Border (386) Heavy Use Area Protection (561) Grassed Waterway (412) Pasture and Hayland Planting (512) Water and Sediment Control Basin (638)
Classic gully/ concentrated flow. Channels that may grow or enlarge by headcutting and lateral widening. Too deep to be erased by normal tillage operations.	Channel bottom, headcuts and sidewalls are stabilized.	Visual observation Gully Erosion Equation	NREPA, Part 91	Diversion (362) Forest Harvest Trails & Landings (655) Grade Stabilization Structure (410) Lined Waterway or Outlet (468) Roof Runoff Management (558) Water and Sediment Control Basin (638)
Other erosion. Soil erosion caused overbank flow, unstable or saturated soils, obstructions, unstable channel bottom, wave action, out-of-bank flow, frequent and intensive use by people, animals or vehicles, or any combination of these.	Areas are stabilized.	Channel Erosion Equation Stream Visual Assessment Protocol EFH Chapter 16 Gully Erosion Equation	NREPA, Parts 31, 301, 323, & 353 Clean Water Act	Heavy Use Area Protection (561) Land Reconstruction, Abandoned Mined Land (543) Land Reconstruction, Currently Mined Land (544) Recreation Area Improvement (562) Recreation Trail and Walkway (568) Stream Channel Stabilization (584) Streambank and Shoreline Protection (580) Stream Crossing and Livestock Access (728)

Table 2
Resource Concerns for Improving the Resource
SOIL

RESOURCE CONSIDERATION	RESOURCE CONCERNS	ASSESSMENT TOOL	LAWS & REGULATIONS
Condition. The chemical, biological, and physical characteristics of the soil as related to its ease of tillage, fitness as a seedbed, and ability to absorb, store, and release water and nutrients.	Soil tilth and organic matter	Soil Condition Index available from ftp://ftp.nssc.nrcs.usda.gov/pub/lighte/scifiles Soil Quality Scorecard	
	Compaction	Soil Penetrometer Visual observation based on "Soil Compaction Symptoms, Causes, Correction, Prevention" Conservation Sheet	
	Soil Contaminants	Soil Test Farm*A*Syst National Agronomy Manual	
	Improper pH	Soil Test	
Deposition. The onsite or offsite accumulations of products of erosion, including sediment, which causes damage to land or structures or endangers safety or reduces productivity.	Damage	Visual observation Historical records (ditch clean outs, news articles, etc.)	
	Safety	Visual observation Historical records (news articles, etc.)	